

# Measles Vaccine Tested

► THE LIVE measles virus vaccine has passed another field test, scientists report in the *Journal of the American Medical Association*, 177:537, 1961.

To date, no one exposed to measles after vaccination has come down with the disease.

Children who have never had measles usually have a fever after receiving the vaccine, and about half get a rash. Most of the reactions, however, are not severe enough to send the child to bed. Of the 103 children studied in the current test, 10 had to go to bed, and they were as ill as one would be with a mild case of measles.

Drs. Samuel Karelitz, Franklin Desposito, Stanley Gittelson, Herbert Goldman, Avron Ross, Floyd S. Markham, James M. Rueggesser and Herald R. Cox of the Long Island Jewish Hospital in New Hyde Park, N. Y., and Lederle Laboratories, Pearl River, N. Y., report that fevers were most frequently between 101 and 103 degrees Fahrenheit. In some cases the mercury went as high as 106 degrees.

Unlike the child with a full blown case of measles, the child who gets the mild measles after vaccination does not spread it to others.

The *Journal* points out editorially (p. 569) that a study of vaccination with killed measles virus vaccine followed by inoculation of live virus vaccine is now in progress. If successful, this may be a way to reduce or eliminate the reactions to the live vaccine.

"Instead of a minimum of 8,000,000 days of illness which results from measles in 1,000,000 patients a year in the United States, it now seems possible to lower the morbidity to less than 3,000,000 days and to reduce the severity of this illness very significantly. Most of the vaccinated children do not feel very ill, they do not spread the disease, and, hopefully, they will have the same immunity which follows ordinary measles," the editorial states.

• *Science News Letter*, 80:179 September 9, 1961

INVENTION

# Patents of the Week

A mask for communication in noisy jet planes, a convertible bicycle, a gamma ray projector for subsurface examination of metals and garterless stockings have been patented.

► JET AIRPLANE ENGINES, given pre-flight tests at full power, make so much noise that the pilot in the cockpit and the man in charge on the ground have had to resort to hand signals to communicate with each other.

To remedy this, inventor Alfred D. Traller, Seattle, Wash., came up with an acoustically insulated microphone mask permitting ready oral communication "at all times regardless of engine noise." He assigned rights to patent No. 2,997,550 to Boeing Airplane Company, Seattle.

The sponge rubber inner shell of the two-piece mask, holding the microphone socket, contains a pair of irregular, "meandering" air passages that deaden the sound by forcing it along a twisting path after it comes in through openings on the outer shell. At the same time the ducts make voice communication still clearer by checking the build-up of air pressure on the microphone.

In use, the two pieces fit closely together and can be held in place with one hand. The outer section is also of sponge rubber, but coated with an external resinous "skin." The inner section fits closely over the face, with the muffling passages running from the chin up over the cheek bones.

A bicycle that converts easily from a boy's model to a girl's model, or vice versa, won patent No. 2,997,308 for Alban M. Boudreau, Gardner, Mass. An adjustable curved cross-bar, raised or lowered and held in one of the two positions by a bolt, makes this possible. Rights were assigned to Hedstrom Union Company, Fitch-

burg, Mass. A gamma ray projector for subsurface examination of metals, using radioactive isotopes as the ray source, was awarded patent No. 2,997,592. Inventor Robert B. Costello, Rahway, N. J., assigned rights to the M. W. Kellogg Company, Jersey City, N. J.

Mr. Costello points out that nuclear reactors, producing isotopes artificially, have made gamma ray sources cheaper than X-ray sources. X-ray projectors have the added disadvantage of requiring a "large amount of bulky and expensive electrical equipment."

In the smallest model described, Mr. Costello's gamma ray device weighs about 50 pounds and can be hand-carried. When not in use, the radiation source stays entirely inside a rotary positioning section made of lead shielding. The radiographer must take precautions only against "scattered radiations of low penetrating effect" during the actual shot, and is "completely safe" at all other times, according to the inventor.

A type of self-sustaining or garterless stocking, its upper portion designed not to roll down beyond a predetermined point, won patent No. 2,996,726 for Nathan Mayer, Yonkers, N. Y. Rights were assigned to Prestige, Inc., New York.

The stocking is held in place by a narrow band of latex, casein, or a mixture of both, coated inside the fabric at the upper end of the knee portion.

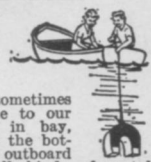
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